

an acute condition (acute tonsillitis in an 8 year old child) and a chronic condition (an adult with diabetes mellitus type 2) was developed. WTP for a BD as compared with a GD was assessed in both scenarios using the payment scale and the open-ended formats. The study was approved by the local ethical committee. **RESULTS:** Respondents were predominantly women (57%) and the mean age was 54 y.o. A family income of less than R\$ 1,356,00 was reported by 16%. For the total study sample, the maximum WTP for a BD (over and above the mean retail price of a GD) for the acute and chronic case scenarios were on average R\$ 27,54 and R\$ 21,04 when measured by the payment scale and R\$ 36,54 and R\$ 24,77 when measured by the open-ended question, respectively. These values are 36% to 65% above the mean retail prices of the corresponding GD. **CONCLUSIONS:** Patients and accompanying persons were willing to pay considerably more for the BD when compared to GD. This may be driven by the perception of higher perceived effectiveness and safety of BD.

INDIVIDUAL'S HEALTH – Health Care Use & Policy Studies

PIH52

PROTECTIVE FACTORS FOR UNIVERSITY STUDENTS' HEALTH

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OBJECTIVES: To assess which of the studied factors were positively associated with the students' health and to investigate which of these factors stood out as the most important protective factors for their health. **METHODS:** Data were obtained from a cross-sectional study conducted during the academic 2011/2012th at the universities in Niš, Belgrade and Novi Sad, which surveyed a total of 2285 students of both sexes. This study examines variables such as physical, psychological and social health, protective factors and risk factors. Students were assessing their own health answering the questionnaire. **RESULTS:** Only 11.8% of the surveyed students have assessed their health as excellent, 72.5% as very good or good, and 15.7% as poor or very poor. Better health status was positively correlated with the quality of sleep, the existence of free time, physical and social activities, religiosity and built health values in all three universities. Kruskal-Wallis H test showed that better students are more satisfied with their life ($p < 0.001$), that better assess their health ($p < 0.01$) and less drink alcoholic beverages. Female students had more physical pain, were more frequently depressed than men, they were more easily tired, they were much more nervous and had more problems than men with sleep. Men assessed their health as better than female students. However, the satisfaction scale (χ^2 homogeneity test; $p < 0.001$) were found females to be more satisfied with their lives than male students. **CONCLUSIONS:** General health is affected by various physical, psychological and social aspects of health. The results show that there are significant protective factors for better social, psychological and general health in students that may be affected. Therefore, health promotion decision makers should adopt contemporary strategies that will in the future put emphasis on the social and psychological components of students' health.

PIH53

SOCIETAL BURDEN OF HYSTERECTOMY IN REPRODUCTIVE-AGED WOMEN WITH UTERINE FIBROIDS

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OBJECTIVES: Uterine fibroids (UF) affect approximately 20% to 40% of reproductive-aged women. The mainstay of treatment of symptomatic UF is surgical. Myomectomy surgically removes UF while preserving the uterus. However, hysterectomy that is considered to be the definitive treatment of UF, causes infertility. The aim of our study was to analyze the prevalence of hysterectomy in Hungary among reproductive-aged women with UF to assess the societal burden due to lost fertility. **METHODS:** Database were analyzed. Surgical procedures for the treatment of UF (ICD-10: D25), in 20-45 years old women between 2007 and 2012 were analyzed based on the Hungarian National Health Insurance Fund database. Economic burden of lost fertility was assessed by the human capital approach. Present value of life for a newborn child was calculated by applying 2011 GDP per capita and 3.7% discount rate. **RESULTS:** Among 11,095 women with surgical procedure related to UF the prevalence of hysterectomy was 61.5% ($n=6827$). Most hysterectomised women ($n=4781$) were 40-45 years old; unexpectedly a significant number of 20-40 years old women with UF had hysterectomy ($n=2046$). Present value of a newborn child was 262,314 EUR in 2011. **CONCLUSIONS:** Our results indicate that immediate hysterectomy, even in women under 40 years, is still a frequently performed surgical procedure for the treatment of UF. The macroeconomic consequences of lost fertility due to hysterectomy in reproductive-aged women with UF are significant. Even only one additional child-birth due to avoided hysterectomy would result in significant societal and economic benefits. Further scientific evaluations are needed to define more accurately the long term macroeconomic impact of preserved fertility in women with UF.

PIH54

MANAGEMENT OF OBESE WOMEN DURING PREGNANCY ACROSS EUROPE ACCORDING TO CLINICAL PRACTICE GUIDELINES

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OBJECTIVES: To review, within the framework of the FP7 DALI (Vitamin D And Lifestyle Intervention for Gestational Diabetes Mellitus (GDM) Prevention) study, guidelines for the management of obese women during pregnancy across Europe to assess the specificity of the recommendations in this group at risk of adverse

pregnancy outcomes. **METHODS:** To determine whether additional clinical tests, advice, planning, management or pregnancy follow-up were recommended for obese women during pregnancy, Clinical Practice Guidelines (CPGs) were collated from across the Endocrinology and Obstetrics National Societies websites of the 9 European countries participating in the FP7 DALI study (Austria, Belgium, Denmark, Ireland, Italy, The Netherlands, Poland, Spain, UK). This was complemented by a Medline search and a survey among the investigators of the DALI study. **RESULTS:** Fifteen CPG for 9 countries were retrieved. All but Spanish guidelines, which recommend O'Sullivan test, recommend OGTT 75g to detect GDM in obese women. Most of them include 24-28 weeks as the time for OGTT, but other schedules are also used, especially when risk factors other than obesity are present. Other common recommendations for obese women in European CPGs were diet advice (included in the guidelines of 6 different countries), special birth planning (5 countries), exercise and other lifestyle recommendations (4 countries) and vitamin D supplementation, multidisciplinary follow-up (including endocrinologist or diabetologist) and additional ultrasound scan (3 countries). **CONCLUSIONS:** Recommendations for obese women in the studied countries are heterogeneous and in many cases do not include actions beyond screening for GDM. Existing guidelines will be reviewed in the light of the findings from the interventions studied in the framework of the DALI study.

PIH55

LONG-TERM FISCAL IMPLICATIONS OF FUNDING ASSISTED REPRODUCTIVE THERAPIES: A GENERATIONAL ACCOUNTING MODEL FOR SPAIN

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OBJECTIVES: Infertility affects 14% of couples in reproductive age in Spain. Progressive population ageing leads the assessment of policies that favor birth-rates. The objective is estimating the lifetime economic benefits of publicly financing assisted reproductive therapies (ART) in Spain, by calculating the return on this investment. **METHODS:** Generational accounting model that simulates the flow of taxes paid by the individual minus those direct government transfers received (e.g. health care, education, pensions) over the lifecycle of a child. The cost of ART was calculated as the average cost of conceiving a child through currently available ART in Spain. The difference between discounted transfers and taxes minus the cost of ART equals the net present value (NPV) of a child conceived by ART. Year 2006 was set as the base case because of its macroeconomic stability. A 3.5% discount rate was applied. Sensitivity analysis tested robustness of results under different scenarios. **RESULTS:** An ART-conceived child would contribute €534,624 in net taxes to the government and would receive €479,952 in governmental transfers over her lifecycle. After discounting the cost of ART (9,000€) the NPV is estimated at €45,672. Each Euro invested in subsidizing ART reverts into fiscal benefits of €5. Sensitivity analysis shows that even in extreme macroeconomic scenarios, the long-run NPV of an ART-conceived child ranges between €11,233 and €62,470. The return on investment varies between €1.25 y €6.94 € for each Euro invested in ART. The break-even age at which the financial position begins to be favorable to the Spanish Treasury was set at 34-42 years. **CONCLUSIONS:** Generational accounting models allow estimating long-term fiscal implications of public funding of ART. Each Euro invested in subsidizing ART reverts into fiscal benefits of €5. Thus, investment in ART leads to substantial discounted future fiscal revenue for the Spanish Treasury, notwithstanding its beneficial psychological effect for infertile couples.

PIH56

WOULD A NEW THERAPY FOR CHILDREN BE REFUSED IN THE CONTEXT OF THE GERMAN AMNOG?

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OBJECTIVES: The new German law AMNOG was introduced in 2011. According to it all newly launched therapy options would need to be evaluated by the Institute for Quality and Efficiency in health care (IQWiG) and the joint federal committee (Gemeinsamer Bundesausschuss, GBA) before a final price negotiation will happen. Given the specific characteristics of pediatric patients it is uncertain if a new drug for those patients would successfully pass the AMNOG process. **METHODS:** The AMNOG evaluation criteria were applied to the specifics of pediatric drugs. A special focus was given to the benefit assessment method, clinical trial designs and the AMNOG process. **RESULTS:** Current HTA evaluation methods being applied to medical therapies, in general, need to be modified when applied to pediatric therapies. For example, traditional benefit evaluations that require randomized clinical trials are standard but cannot always be fulfilled in this patient population. In pediatric development programs one-arm studies are standard with surrogate endpoints in order to minimize the exposure of children to an experimental therapy. Additionally the naturally low sample size within pediatric indications linked to the different natural subgroups of children (babys, toddlers, etc.) make a formal additional benefit proof even harder. Hence from a benefit assessment perspective the clinical study design, sample size and choice of endpoint are most crucial but could hardly be executed in pediatric trials. With respect to the AMNOG process only pediatric trials in orphan disease could pass successfully given the exception rules for the additional benefit. **CONCLUSIONS:** If the German health care system is to secure the full benefits of potential new pediatric therapies, it will need to provide a similar process as it is granted for orphan drugs.

PIH57

HEALTH OUTCOMES OF FEMALE ANABOLIC-ANDROGENIC STEROID USERS

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